



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,182	08/08/2001	Satoshi Yoshizawa	16869B-018700US	2345

20350 7590 12/02/2005

TOWNSEND AND TOWNSEND AND CREW, LLP  
TWO EMBARCADERO CENTER  
EIGHTH FLOOR  
SAN FRANCISCO, CA 94111-3834

EXAMINER

LOVING, JARIC E

ART UNIT PAPER NUMBER

2137

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/925,182	<b>Applicant(s)</b> YOSHIZAWA ET AL.	
	<b>Examiner</b> Jaric Loving	<b>Art Unit</b> 2137	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because "network management system (NMS)" (p. 6 of the specification) does not contain a reference numeral. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities: on page 13, line 5, "matter" is believed to be --manner--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 3, line 1 recites the limitation "A router system as in claim 2." There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4, 7-16, 19-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshizawa, US 6,944,169.

In claim 1, Yoshizawa discloses a system for for allocating resources to enable provision of different levels of service for different users of a network having nodes at which routers are placed to direct information along various paths, the system comprising (abstract, Figure 1, col. 1, lines 7-39):

a first allocation of resources at a node, the first allocation being made by a first management system external to the node that manages at least part of the network (col. 2, lines 54-59; col. 3, lines 58-67; col. 4, lines 1-28 – data service provider manages the network by re-allocating resources); and

a second allocation of resources at the node, the second allocation being made by a second management system having a limited capability compared to the first management system and usable by the node in accordance with priorities determined at the node (col. 2, lines 42-59; col. 3, lines 58-67; col. 4, lines 1-37 – second information acts only as a trigger to activate the network device, which is more limited compared to first information of containing different network attributes).

In claim 2, Yoshizawa discloses a system as in claim 1 further comprising a flow control table at the node operating under control of the second management system for storing entries which each include (col. 3, lines 58-67; col. 5, line 38 – col. 6, line 54):

source addresses representative of at least one source of information arriving at the input port (col. 1, lines 12-25; col. 4, lines 15-24; col. 7, lines 21-39);

destination addresses representative of at least one of the destinations to which the arriving information is to be sent from the output port (col. 1, lines 12-25; col. 4, lines 15-24; col. 7, lines 21-39);

priority information for each address consisting of a capability of at least two different priorities for controlling the forwarding of information arriving from the source to the destination (col. 2, lines 42-53; col. 8, lines 38-57 – numerous data packets contain different priorities and some may be changed by quality of service); and

wherein with the priority information is changeable at the node without reference to the first management system (col. 2, lines 54-59; col. 4, lines 29-47 – destination site is like a node, which has software that can re-sequence the data).

In claim 3, Yoshizawa discloses a router system as in claim 2 wherein the router system includes a router for switching information and a controller coupled to the router for storing the flow control table and controlling the router in response thereto (Figure 2, col. 5, line 38 – col. 6, line 7).

In claim 4, Yoshizawa discloses a router system as in claim 3 wherein the priority information includes default priority information used to control information which does not otherwise have an entry in the flow control table (col. 1, lines 51-59; col. 2, lines 29-53 – automated controller that manages network devices and responds to traffic conditions or changes in video data through quality of service, which acts similar to priority information used to control information in a flow control table).

In claim 7, Yoshizawa discloses a system as in claim 6 wherein the controller manages the flow control table using two application program interfaces (col. 9, line 57 – col. 10, line 2; col. 12, lines 49-60 – two different embodiments applying an application program interface to manage the flow control table).

In claim 8, Yoshizawa discloses a system as in claim 7 wherein the applications program interfaces include a first one for managing default priority information for a longer term usage, and a second one for managing the remaining entries of the flow control table for a shorter term usage (col. 9, line 57 – col. 10, line 2; col. 12, lines 49-60; col. 13, line 49 – col. 14, line 38 – video streams that have priority can be given more bandwidth or less based on usage).

In claim 9, Yoshizawa discloses a system as in claim 8 wherein the first and second applications program interfaces are under control of a network management

system (col. 3, lines 58-67; col. 9, line 57 – col. 10, line 2; col. 12, lines 49-60 – data service provider manages the network).

In claim 10, Yoshizawa discloses a system as in claim 9 wherein the network management system is controlled by a network service provider (col. 3, lines 58-67 – data service provider anticipates network service provider).

In claim 11, Yoshizawa discloses a system as in claim 9 wherein the first applications program interface is controlled by a network service provider and the second applications program interface is controlled by a provider of the source of information (col. 3, line 58 – col. 4, line 28; col. 9, line 57 – col. 10, line 2; col. 12, lines 49-60 – data service provider controls network devices which contain applications program interface).

In claim 12, Yoshizawa discloses a system as in claim 11 wherein the controller manages the flow control table using a single applications program interface (col. 1, line 60 – col. 2, line 8; Figure 2; col. 5, lines 49-64).

In claim 13, Yoshizawa discloses a system as in claim 12 wherein the applications program interface manages default priority information for longer term usage and manages the remaining entries of the flow control table for shorter term usage (col. 13, line 49 – col. 14, line 38 - video streams that have priority can be given more bandwidth or less based on usage).

In claim 14, Yoshizawa discloses in a system for dynamically allocating resources to enable provision of different levels of service for different users of a

network having nodes at which routers are placed to direct information along various paths, a method comprising (abstract, Figure 1, col. 1, lines 7-39):

allocating a first level of service from a remote source (col. 2, lines 54-59; col. 3, lines 58-67; col. 4, lines 1-28);

allocating a second level of service from a local source, the second level of service using resources available from the first level of service (col. 2, lines 42-59; col. 3, lines 58-67; col. 4, lines 1-37);

receiving information at an input port from a source (col. 1, lines 12-25; col. 4, lines 15-24; col. 7, lines 21-39);

storing in a flow control table entries which include source addresses representative of a source of information arriving at the input port, destination addresses representative of a destination to which the arriving information is to be sent, and priority information for each source address, which priority information includes at least two different priorities (col. 1, lines 12-25; col. 4, lines 15-24; col. 2, lines 42-53; col. 7, lines 21-39; col. 8, lines 38-57);

and forwarding information arriving from the source to the destination address with a priority based upon the priority information in the flow control table (col. 2, lines 42-53; col. 8, lines 38-57).

In claim 15, Yoshizawa discloses a method as in claim 14 wherein the method further comprises using a controller coupled to the router to store the flow control table and controlling the router in response thereto (Figure 2, col. 5, line 38 – col. 6, line 7).



In claim 16, Yoshizawa discloses a method as in claim 15 wherein the method further comprises using default priority information to control arriving information which does not otherwise have an entry in the flow control table (col. 1, lines 51-59; col. 2, lines 29-53).

In claim 19, Yoshizawa discloses a method as in claim 18 wherein the method further comprises using applications program interfaces to allow the controller to manage the flow control table (col. 9, line 57 – col. 10, line 2; col. 12, lines 49-60).

In claim 20, Yoshizawa discloses a method as in claim 19 wherein method further comprises using a first applications program interface to manage default priority information for longer term usage, and using a second applications program interface to manage remaining entries of the flow control table for shorter term usage (col. 9, line 57 – col. 10, line 2; col. 12, lines 49-60; col. 13, line 49 – col. 14, line 38).

In claim 21, Yoshizawa discloses a method as in claim 20 further comprising using a network management system to control the first and second applications program interfaces (col. 3, lines 58-67; col. 9, line 57 – col. 10, line 2; col. 12, lines 49-60).

In claim 22, Yoshizawa discloses a method as in claim 21 further comprising using a network service provider to control the network management system (col. 3, lines 58-67).

In claim 23, Yoshizawa discloses a method as in claim 22 further comprising using a network service provider to control the first applications program interface and using a provider of the source of information to control the second applications program

interface (col. 3, line 58 – col. 4, line 28; col. 9, line 57 – col. 10, line 2; col. 12, lines 49-60).

In claim 24, Yoshizawa discloses a method as in claim 23 further comprising using a single applications program interface to manage the flow control table (col. 1, line 60 – col. 2, line 8; Figure 2; col. 5, lines 49-64).

In claim 25, Yoshizawa discloses a method as in claim 24 further comprising using the applications program interface to manages default priority information for longer term usage and using the remaining entries of the flow control table to manage for shorter term usage (col. 13, line 49 – col. 14, line 38).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5-6 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa as applied to claims 3 and 16 above, and further in view of Mate, US 2003/0056001.

In claims 5 and 17, Yoshizawa teaches a router with a capacity, but fails to teach that not all of the capability of the router is allocated by the controller. Mate teaches that not all of the capability of the router is allocated by the controller (abstract; paragraphs [0013], [0038], [0061]).

It would have been obvious to one skilled in the art at the time of applicant's invention to recognize that it is advantageous to provide a router where not all of its capability is allocated by the controller. It is for this reason that one of ordinary skill in the art would have been motivated to enable Yoshizawa's resource allocation with a router where not all of its capability is allocated by the controller because it provides better utilization of network resources and more flexible services by adjusting the quality of service levels.

In claims 6 and 18, Yoshizawa fails to teach an unallocated portion of the router capacity being reserved for use as a virtual private network. Mate teaches an unallocated portion of the router capacity being reserved for use as a virtual private network (abstract, paragraphs [0013], [0038], [0061]).

It would have been obvious to one skilled in the art at the time of applicant's invention to recognize that it is advantageous to provide an unallocated portion of the router capacity being reserved for use as a virtual private network. It is for this reason that one of ordinary skill in the art would have been motivated to enable Yoshizawa's resource allocation with an unallocated portion of the router capacity being reserved for use as a virtual private network because it provides better utilization of network resources and more flexible services by adjusting the quality of service levels.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Fielding, US 6,012,084; Vaid, US 6,078,953; McCloghrie, US 6,286,052; Gai, US 6,434,624; Gbadegesin, US 6,779,035; Johnson, US 6,789,131;

Art Unit: 2137

Cain, US 6,810,427; Parent, US 2002/0103927; Brittenham, US 2002/0178244; Basso, US 2003/0009584; Brouk, US 2003/0041178.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaric Loving whose telephone number is (571) 272-1686. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JL



**BUNJOB JAROENCHONWANIT**  
**PRIMARY EXAMINER**

**BUNJOB JAROENCHONWANIT**  
**PRIMARY EXAMINER**